#### REMARKS

The undersigned hereby thanks Examiners Slifka and Mayes for their time and courtesy in the personal interview with the undersigned on September 22, 2010. A proposed amendment to claim 1 was furnished Examiner Slifka in advance of the interview for the purpose of providing a clarification, as seemingly required by the final rejection. However, that proposed amendment is not included here because the Examiners deemed it unnecessary. As stated by Examiner Slifka in the "Interview Summary," Examiner expressed that such an amendment is not necessary and may even be redundant and/or lead to indefinite issues."

Claim 2 is amended here because, as noted at the interview, wording appeared to be missing. A comparison with the original wording of claim 2 confirmed that wording had been inadvertently omitted from claim 2. That language is restored by the present amendment. The terminology "first stage" and "second stage" has also been added, consistent with the specification, for clarification.

At the outset of the interview Examiner Mayes questioned the meaning of the terminology "spindle-shaped." Applicants confirm that "spindle-shaped" is a term of art defined by the "Goo-dictionary," a popular E-dictionary in Japan, as describing a "columnar shape whose diameter is thick (large) at a center and becomes gradually thin towards both ends."

The rejection of claims 1 and 3-9 for obviousness over Kurata et al (JP 2000-212892) in view of Nishijima et al (JP 10-310996) is respectfully traversed. Neither Kurata et al nor Nishijima et al disclose or suggest a calcium carbonate in the form of aggregates (secondary particles), each aggregate consisting of spindle-shaped **primary** particles. At bottom of page 3 of the final action the Examiner correctly characterizes Kurata et al as disclosing "such a coating composition is composed of a spindle-shaped precipitated calcium carbonate .... in a **secondary** particle shape." [Emphasis of the undersigned]. In [0017] Kurata et al teach "That **aggregated particle shape is spindle-shaped** has the big feature ...." Also see [0011], [0012] and [0025]. Applicants are not claiming a calcium carbonate in the form of spindle-shaped aggregates (secondary particles); rather, applicants here claim a calcium carbonate product in the form of aggregates, each aggregate consisting of **primary** 

particles which are spindle-shaped and have the other characteristics recited by applicants' claims, and a method of producing same. Applicants' aggregates (secondary particles) are not themselves spindle-shaped, as they have verified by SEM.

At the interview Examiner Mayes argued that the language of the machine translation of Kurata et al could be construed to mean either that the aggregate (secondary particle) itself is spindle-shaped or that the primary particles, a plurality of which form each secondary particle or aggregate, are spindle-shaped. The undersigned argued that, particularly in view of [0017] of the machine translation, the teachings must be interpreted to mean that the secondary particles are spindle-shaped and that the reference nowhere suggests that the primary particles would be spindle-shaped. In any event, the Examiners will consult with a USPTO translator to determine the proper reading.

The secondary reference, Nishijima, is not cited for any disclosure of a spindle-shaped particle and no combination of Kurata et al and Nishijima would lead to aggregates of primary particles, wherein the primary particles forming the aggregates are themselves spindle-shaped.

Further, even if aggregates of spindle-shaped primary particles were disclosed by Kurata et al, it would not have been obvious from the teachings of Nishijima et al to provide those hypothetical primary particles with an aspect ratio of 3.0 or more. Nishijima et al teach only how to produce such an aspect ratio in a "needle-like or prism-like precipitated calcium carbonate," quoting from the English language abstract, not in a differently shaped particle.

At page 6 of the final action the Examiner asserted "that features upon which the applicant relies (i.e., aggregates) are not recited in the rejected claims." In making the quoted statement the Examiner either overlooked or misunderstood "flocculated" in applicants' claim 1. In any event, at the interview, Examiners Slifka and Mayes confirmed that no clarification by amendment is needed.

At page 6 of the final action the Examiner also stateD:

"Applicant's argumentation on the production of the calcium carbonate particles is not persuasive, as the instantly claimed invention is drawn to the product, not the process of making."

The comment quoted immediately above apparently has reference the argument in applicants' previous response to the effect that the reference teachings "could not properly be characterized as enabling for the product claimed here." As noted in applicants' previous response, Kurata et al do not teach how to make any calcium carbonate particulate product. In [0021] Kurata et al identify a commercial source for their spindle-shaped secondary particles (aggregates). Even if commercial availability of the spindle-shaped aggregates could be relied upon as indicating that a method for forming spindle-shaped aggregates is known in the art, it would not logically follow that a method for making spindle-shaped primary particles (that make up an aggregate) is also known. Unless one skilled in the art would know how to make (a method) the product claimed here, the references cannot properly be characterized as enabling for the claimed product and, for lack of enablement, do not support a prima facie case for obviousness of the product (or a process). In re-Hoeksema, 158 USPQ 596 (CCPA 1968). At the interview, Examiner Mayes argued that commercial availability would make the teachings of Kurata et al enabling. Even if the the invention of Kurata et al, i.e., a coating method and coating composition, is enabled it does not follow that the commercial, spindle-shaped aggregates are enabled, much less that the aggregates of spindle-shaped particles claimed here would be enabled.

Regarding potential rejoinder of claim 2 and the Examiner's remarks in the first paragraph of section 6, at page 5 of the final action, MPEP 821.04(b) provides for rejoinder of a process claim upon allowance of a product claim, provided the process claim includes all limitations of the allowable product claim. In belief that claim 1 was in condition for allowance, in applicants' previous response, process claim 2 was amended to depend from claim 1 and thereby limited by incorporation of all limitations of claim 1.

In conclusion it is respectfully requested that the Examiner reconsider and withdraw the rejection of record and rejoin claim 2.

Respectfully submitted, BACON & THOMAS, PLLO

Registration No. 25,814

George A. Loud

Date: September 27, 2010

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## FACSIMILE COMMUNICATION

To:

Examiner Slifka

Fax #:

571<del>272-17</del>07 **270-6830** 

Re:

USSN 10/556,934

From:

George Loud, Bacon & Thomas, PLLC

703 683-0500

Date: September 21, 2010

Confidential

This communication contains confidential information that is intended to be received and read only by the addressee(s). This communication may contain information that is subject to a court order restricting its dissemination. No one else is entitled to read, use, copy or disseminate this communication or the information contained herein. If you are not the addressee, then contact us immediately by telephone or facsimile and arrangements will be made for the return to us of this communication.

Thank you, BACON & THOMAS, PLLC

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Please	confirm	receipt	by ref	turn f	acsimile.

- □ Please call sender.
- □ Confirmation copy follows by □ Mail □ Courier

# Message:

Mr. Slifka,

I am herewith transmitting a proposed response for your review in preparation for our interview scheduled for 2:00 PM on Wednesday, September 22<sup>nd</sup>. George Loud

### PROPOSED RESPONSE - DO NOT ENTER

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	Confirmation No.: 3752
Kazuo YAMASHITA et al.	, )	Art Unit: 1793
Serial No: 10/556,934	)	Examiner: Micali, Joseph
National Phase Filed: November 16, 2005	)	

For: PRECIPITATED CALCIUM CARBONATE, METHOD FOR PRODUCING THE SAME AND FILLER FOR LOADING PAPER USING THE SAME

**RESPONSE TO FINAL ACTION UNDER 37 CFR 1.116** 

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Responsive to the office action of May 25, 2010, please amend the captioned application as follows.

### IN THE CLAIMS:

- 1. (Currently amended) Precipitated calcium carbonate having a secondary particle diameter of 1 to 10 μm, each secondary particle being in the form consisting of an aggregate of flocculated primary particles, the primary particles being of spindle-shaped calcium carbonate particles, each having a long diameter of 0.5 to 3.0 μm, a short diameter of 0.1 to 1.0 μm and an aspect ratio of 3 or more, wherein the BET specific surface area is in the range of 8 to 20 m²/g, and the pore volume is in the range of 1.5 to 3.5 cm³/g.
- 2. (Previously presented) A method for producing the precipitated calcium carbonate as defined in claim 1, wherein carbon dioxide or carbon dioxide containing gas is blown into a calcium hydroxide slurry having a calcium hydroxide concentration of 100 to 400 g/L obtained by wet slaking calcined lime whose 4 N hydrochloric acid activity (value at 3 minutes) is adjusted to 150 to 400 mL for reaction until the carbonation rate is 50 to 85% by volume of the calcium hydroxide slurry is added, and carbon dioxide or carbon dioxide containing gas is then introduced to terminate the reaction.
- 3. (Previously presented) Precipitated calcium carbonate manufactured by the producing method of Claim 2.
- 4. (Previously presented) The precipitated calcium carbonate according to Claim 3, wherein the BET specific surface area is in the range of 8 to 20 m<sup>2</sup>/g, and the pore volume is in the range of 1.5 to 3.5 cm<sup>3</sup>/g.
- 5. (Previously presented) A filler for loading paper, which contains the precipitated calcium carbonate according to Claim 1.
- 6. (Original) A loaded paper, which contains the filler for loading paper according to Claim 5.

- 7. (Original) A loaded paper, which contains 5 to 50 parts by weight of the filler for loading paper according to Claim 5 based on pulp material as 100 parts by weight.
- 8. (Previously presented) A filler for loading paper, which contains the precipitated calcium carbonate according to Claim 3.
- 9. (Previously presented) A filler for loading paper, which contains the precipitated calcium carbonate according to Claim 4.

#### REMARKS

Regarding the term "aggregate" which would be added to claim 1 by the proposed amendment, see, for example, page 4, lines 7-11, and the abstract of the English translation of applicants' specification. The amendment is offered as a clarification. Note that the language of claim 1, as presented in applicants' previous response, defined the primary particles as "flocculated" which is treated as a synonym for "aggregated" in one definition to be found in standard dictionaries.

The rejection of claims 1 and 3-9 for obviousness over Kurata et al (JP 2000-212892) in view of Nishijima et al (JP 10-310996) is respectfully traversed. Neither Kurata et al nor Nishijima et al disclose or suggest a calcium carbonate in the form of aggregates (secondary particles), each aggregate consisting of spindle-shaped **primary** particles. At bottom of page 3 of the final action the Examiner correctly characterizes Kurata et al as disclosing "such a coating composition is composed of a spindle-shaped precipitated calcium carbonate .... in a secondary particle shape." [Emphasis of the undersigned]. In [0017] Kurata et al teach "That aggregated particle shape is spindle-shaped has the big feature ... ." Also see [0011], [0012] and [0025]. Applicants are not claiming a calcium carbonate in the form of spindleshaped aggregates (secondary particles); rather, applicants here claim a calcium carbonate product in the form of aggregates, each aggregate consisting of primary particles which are spindle-shaped and have the other characteristics recited by applicants' claims, and a method of producing same. Applicants' aggregates (secondary particles) are not themselves spindle-shaped, as they have verified by SEM.

The secondary reference, Nishijima, is not cited for any disclosure of a spindle-shaped particle and no combination of Kurata et al and Nishijima would lead to aggregates of primary particles, wherein the primary particles forming the aggregates are themselves spindle-shaped.

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In conclusion it is respectfully requested that the Examiner reconsider and withdraw the rejection of record and rejoin claim 2.

Respectfully submitted, BACON & THOMAS, PLLC

Date: September 22, 2010

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